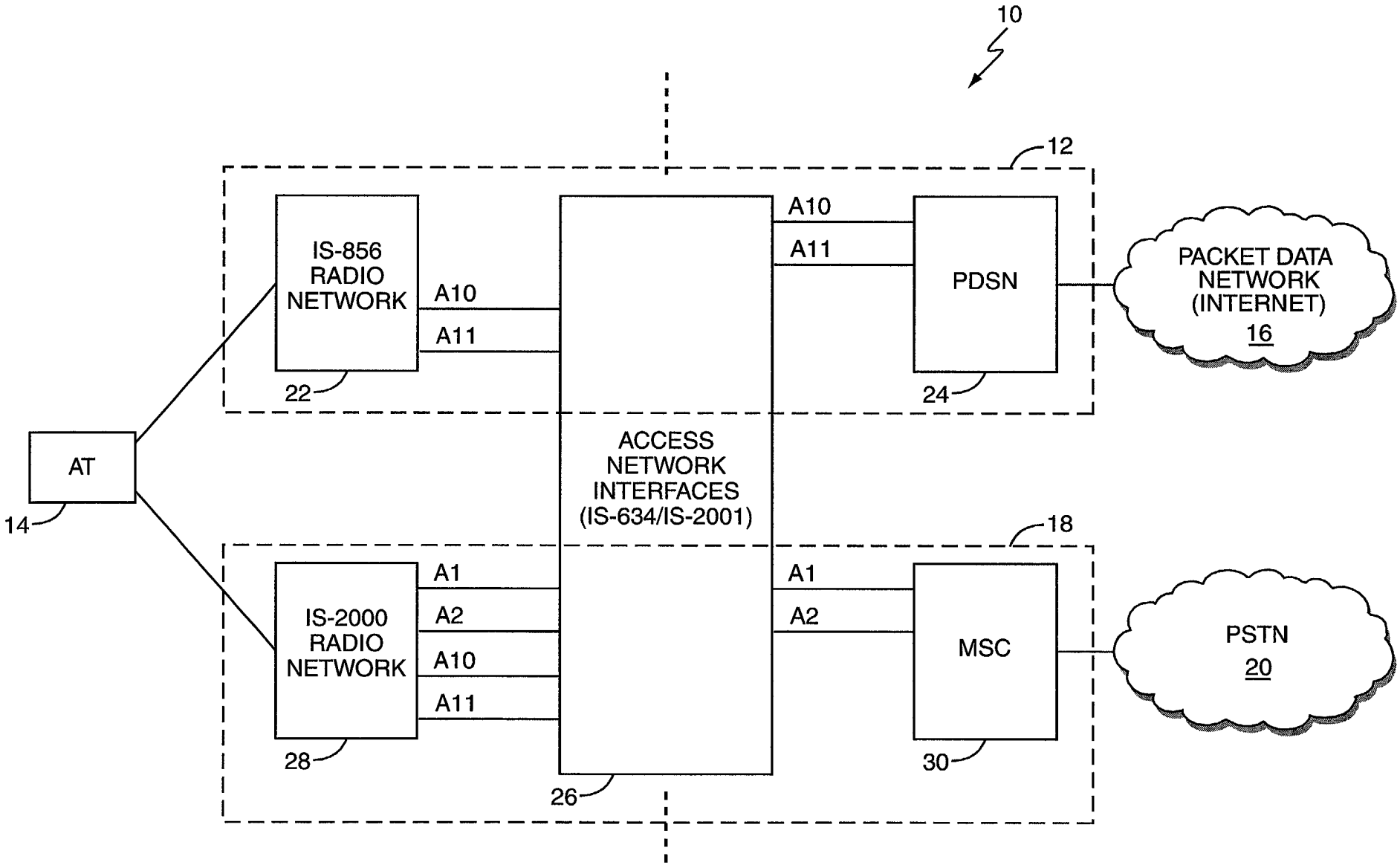
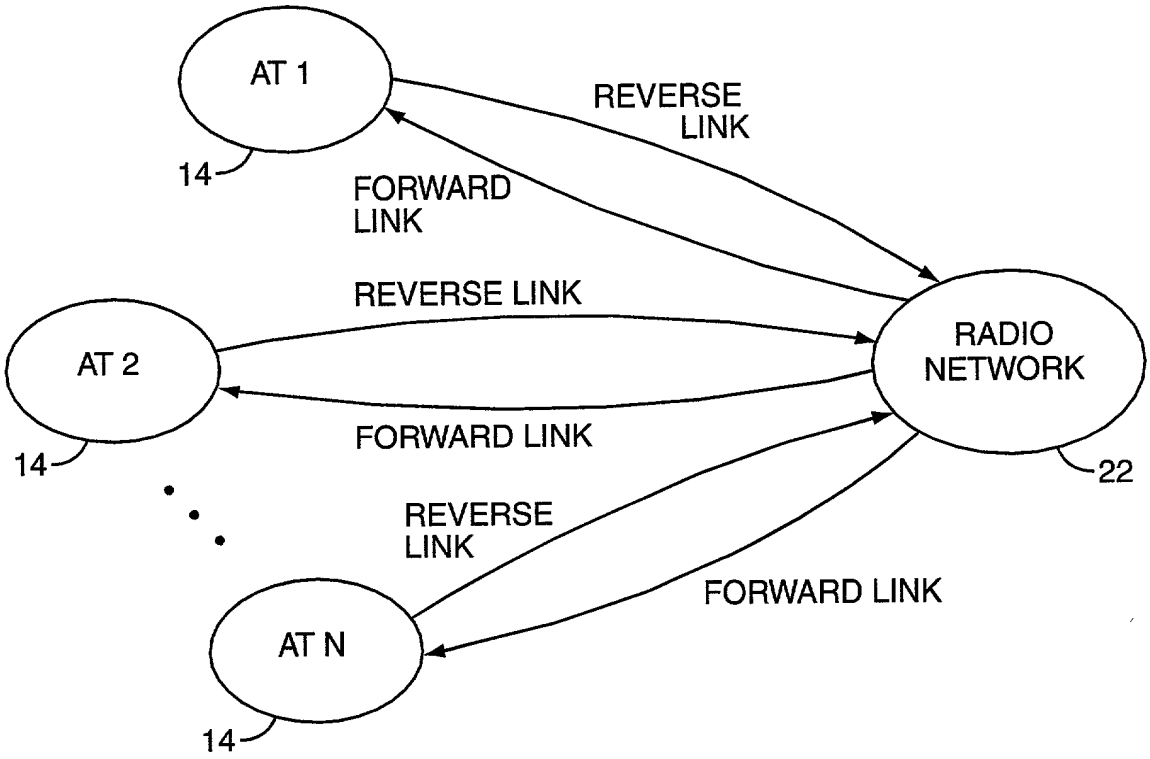

10
12
IS-856
RADIO
NETWORK
A10
A11
22
A10
A11
PDSN
24
PACKET DATA
NETWORK
(INTERNET)
16
AT
14
ACCESS
NETWORK
INTERFACES
(IS-634/IS-2001)
18
IS-2000
RADIO
NETWORK
A1
A2
A10
A11
28
A1
A2
MSC
30
PSTN
20
26

FIG. 1


AT 1
14
REVERSE LINK
FORWARD LINK
REVERSE LINK
AT 2
14
RADIO NETWORK
22
FORWARD LINK
REVERSE LINK
FORWARD LINK
AT N
14

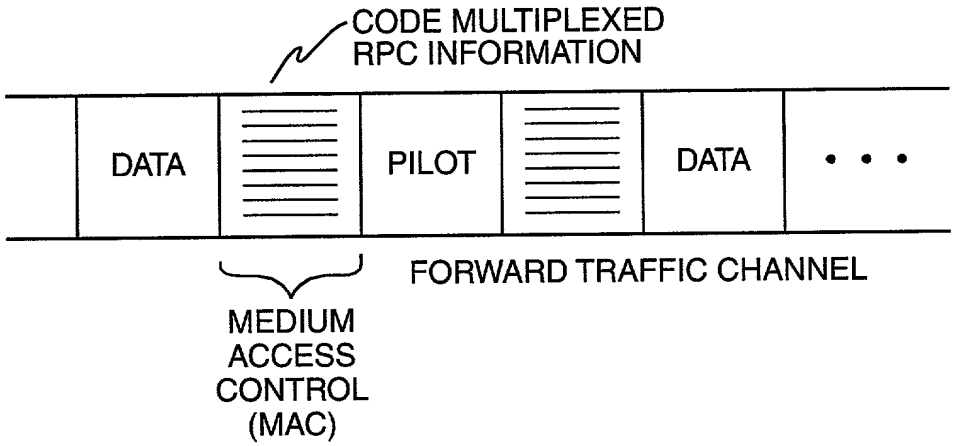

CODE MULTIPLEXED RPC INFORMATION
DATA
PILOT
DATA
FORWARD TRAFFIC CHANNEL
MEDIUM ACCESS CONTROL (MAC)

FIG. 2

PCT/US2003/023823

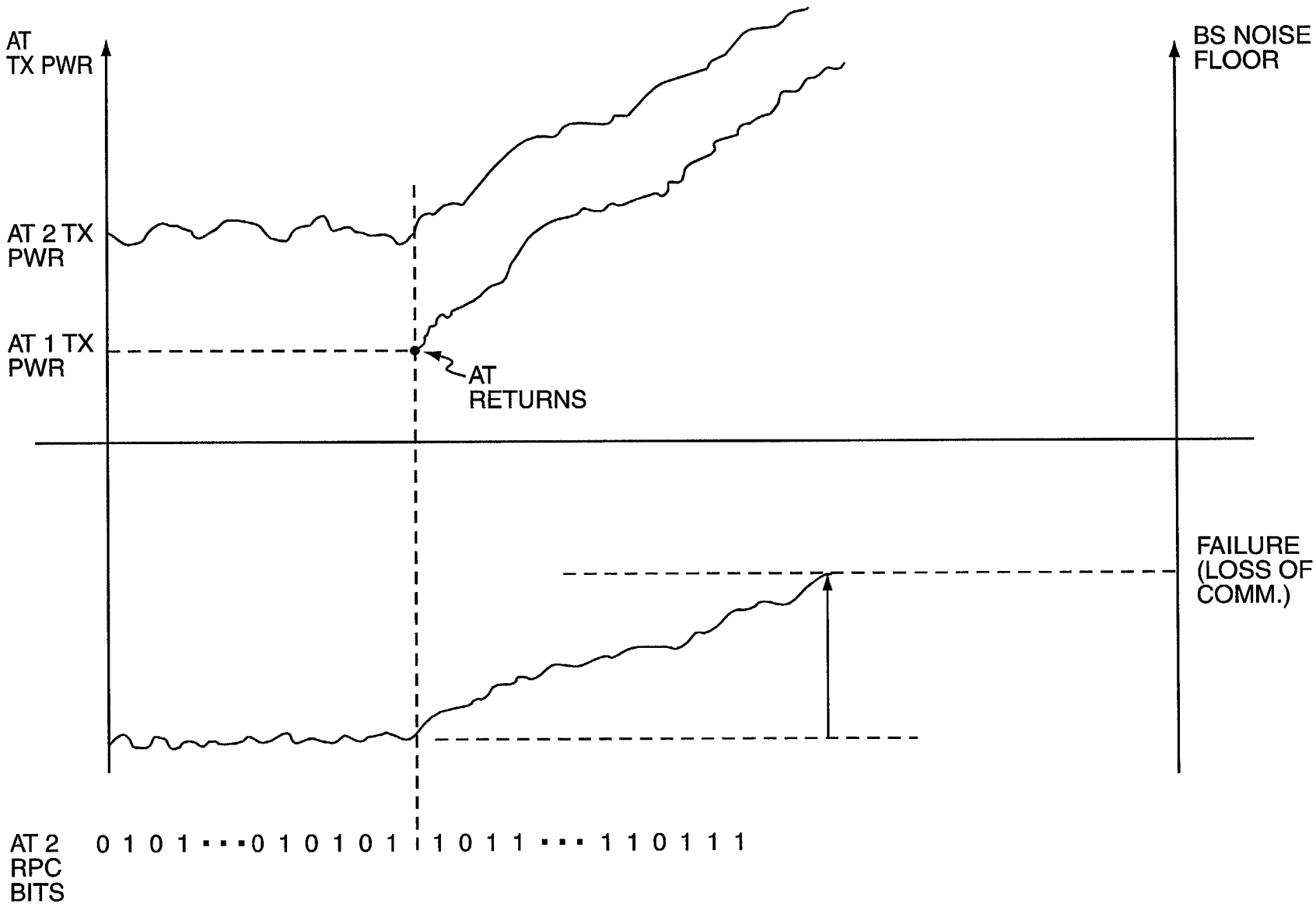


FIG. 3

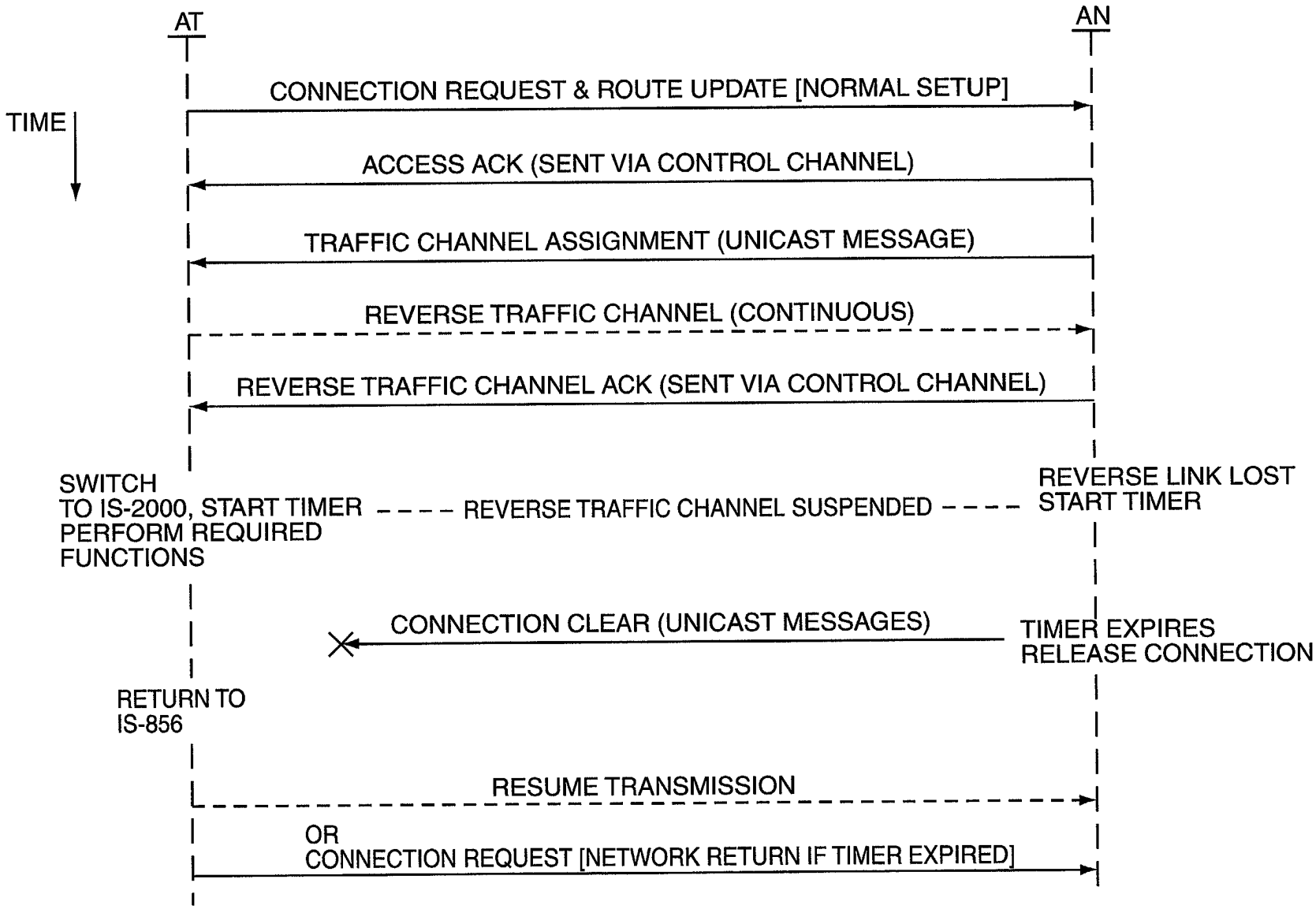

AT
AN
TIME
CONNECTION REQUEST & ROUTE UPDATE [NORMAL SETUP]
ACCESS ACK (SENT VIA CONTROL CHANNEL)
TRAFFIC CHANNEL ASSIGNMENT (UNICAST MESSAGE)
REVERSE TRAFFIC CHANNEL (CONTINUOUS)
REVERSE TRAFFIC CHANNEL ACK (SENT VIA CONTROL CHANNEL)
SWITCH
TO IS-2000, START TIMER
PERFORM REQUIRED
FUNCTIONS
REVERSE TRAFFIC CHANNEL SUSPENDED
REVERSE LINK LOST
START TIMER
CONNECTION CLEAR (UNICAST MESSAGES)
TIMER EXPIRES
RELEASE CONNECTION
RETURN TO
IS-856
RESUME TRANSMISSION
OR
CONNECTION REQUEST [NETWORK RETURN IF TIMER EXPIRED]

FIG. 4

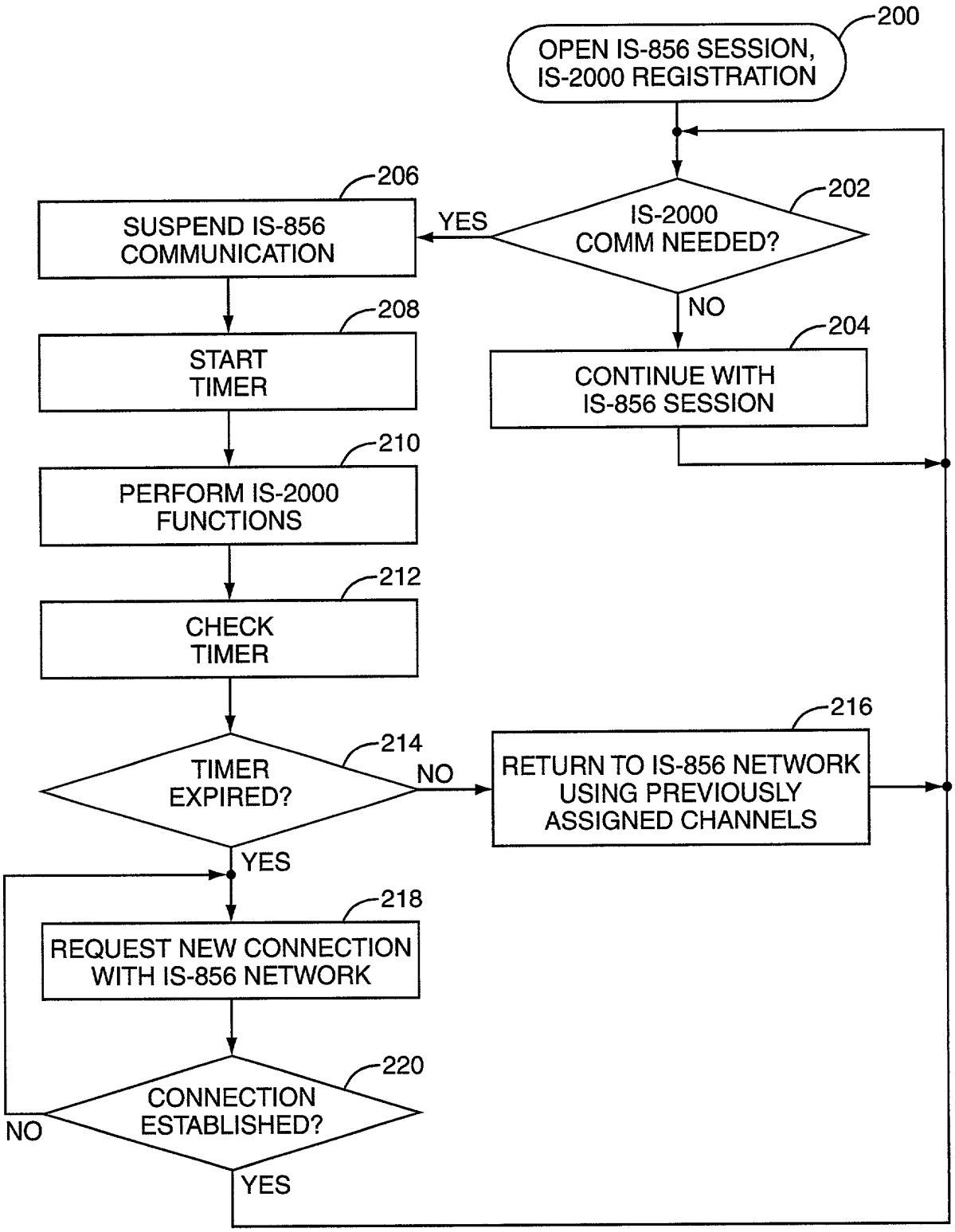

200
OPEN IS-856 SESSION, IS-2000 REGISTRATION
202
IS-2000 COMM NEEDED?
YES
206
SUSPEND IS-856 COMMUNICATION
NO
204
CONTINUE WITH IS-856 SESSION
208
START TIMER
210
PERFORM IS-2000 FUNCTIONS
212
CHECK TIMER
214
TIMER EXPIRED?
NO
216
RETURN TO IS-856 NETWORK USING PREVIOUSLY ASSIGNED CHANNELS
YES
218
REQUEST NEW CONNECTION WITH IS-856 NETWORK
220
CONNECTION ESTABLISHED?
NO
YES

FIG. 5

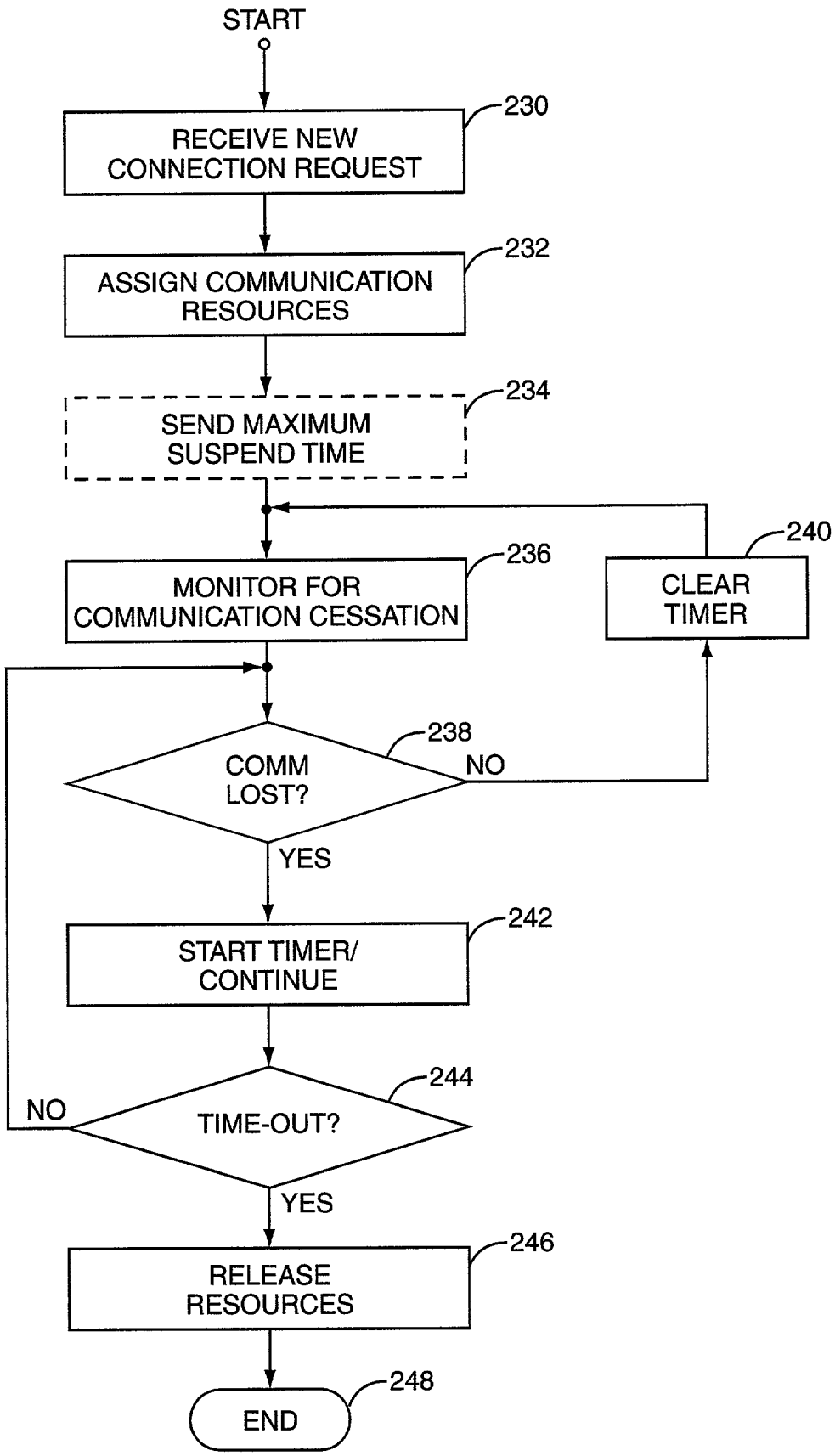

START
RECEIVE NEW CONNECTION REQUEST
230
ASSIGN COMMUNICATION RESOURCES
232
SEND MAXIMUM SUSPEND TIME
234
MONITOR FOR COMMUNICATION CESSATION
236
CLEAR TIMER
240
COMM LOST?
238
NO
YES
START TIMER/ CONTINUE
242
TIME-OUT?
244
NO
YES
RELEASE RESOURCES
246
END
248

FIG. 6

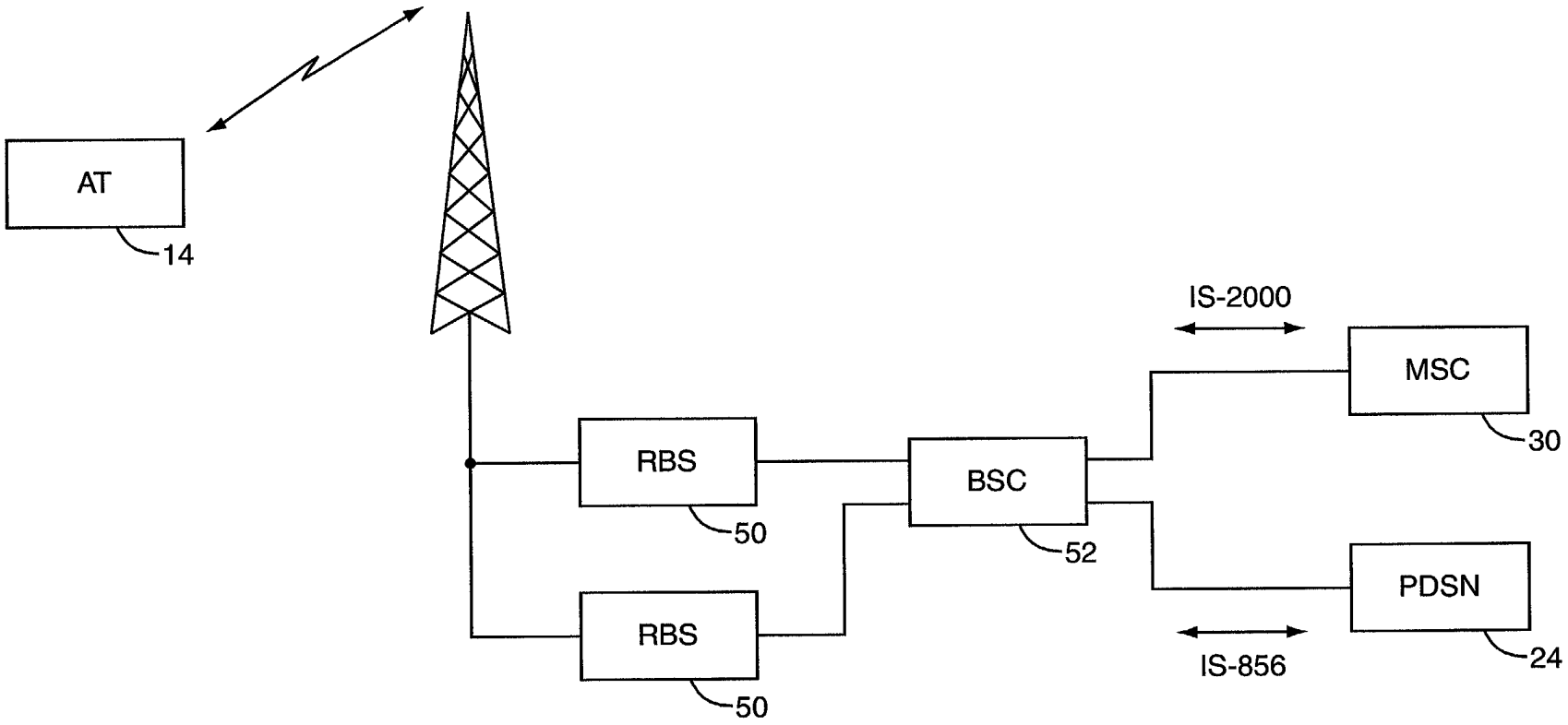


FIG. 7